## CYLINDRICAL GROUND PINs



Our cylindrical pins have the same mechanical and usage features as cylindrical pins according to DIN 6325 and are product with both ends rounded.

## MATERIALS NORMALLY USED

Production of cylindrical pins is mainly realized by using bearing steel UNI $100 \mathrm{Cr} \mathbf{6}$.

100Cr6 is a steel used in over $90 \%$ of roller bearings, thanks to its properties:

- high resistance to adhesive wear , also thanks to lubrication.
- resistance to abrasive wear due to low non-metallic inclusions and uniformity in the distribution of hard carbides which grind any inclusions;
- Resistance to fatigue due to homogeneity of the structure: the steel is core hardened due to the presence of chromium.

Cylindrical pins are core hardened and tempered with value HRC 58-65 ( $670 / 840 \mathrm{HV})$ in order to achieve the maximum mechanical strength.

## Chemical composition:

| Material | $\mathbf{C}$ \% | Mn \% | Si \% | P \% | $\mathbf{S} \%$ | Cr \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 100 Cr 6 | $0,93 \div 1,05$ | $0,25 \div 0,45$ | $0,15 \div 0,35$ | $\leq 0,015$ | $\leq 0,025$ | $1,35 \div 1,60$ |

## International equivalents:

| ITALY | SPAIN | GERMANY | CHINA | USA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| UNI 100 Cr 6 | UNE F 1310 | W. nr. 1.3505 | GCr15 | AISI/SAE 52100 |

## Cylindrical pins can be manufactured with special steel like:

| AISI 302 | AISI 304 | AISI 316 | AISI 420-C |
| :---: | :---: | :---: | :---: | :---: | :---: |

## PRODUCT RANGE

Cylindrical pins are produced in standard and special sizes:

- Diameter
from $2,0 \mathrm{~mm}$. to
$6,0 \mathrm{~mm}$.
- Lenght
from $6,0 \mathrm{~mm}$. to $100,0 \mathrm{~mm}$.


## TECNHNICAL CHARACTERISTIC

| TYPE | DIAMETER mm. |  | DIAMETER TOLERANCE ( $\mu \mathrm{m}$ ) | LENGHT TOLERANCE (mm) |
| :---: | :---: | :---: | :---: | :---: |
|  | FROM | TO |  |  |
| m6 | - | 3 | $+2+8$ | +/- 0,300 |
|  | 3 | 6 | $+4+12$ |  |
| h6 | - | 3 | + $0-6$ |  |
|  | 3 | 6 | + $0-8$ |  |

Cylindrical ground pins can be manufactured with different types of materials and tolerances, if the quantity required is enough for a production.

## CYLINDRIC PINS NORMALLY PRODUCT

| D $\times \mathrm{L}$ (mm) | D $\times \mathrm{L}$ (mm) | D $\times \mathrm{L}$ (mm) | D $\times \mathrm{L}$ (mm) | D $\times$ L (mm) |
| :---: | :---: | :---: | :---: | :---: |
| $2 \times 8$ | $3 \times 24$ | $4 \times 32$ | $5 \times 30$ | $6 \times 20$ |
| $2 \times 10$ | $3 \times 28$ | $4 \times 36$ | $5 \times 32$ | $6 \times 24$ |
| $2 \times 12$ | $3 \times 30$ | $4 \times 40$ | $5 \times 36$ | $6 \times 25$ |
| $2 \times 14$ | $3 \times 32$ | $4 \times 50$ | $5 \times 40$ | $6 \times 28$ |
| $2 \times 16$ | $3 \times 36$ | $4 \times 55$ | $5 \times 45$ | $6 \times 30$ |
| $2 \times 18$ | $3 \times 40$ | $4 \times 60$ | $5 \times 50$ | $6 \times 32$ |
| $2 \times 20$ | $3 \times 50$ | $4 \times 70$ | $5 \times 60$ | $6 \times 36$ |
| $2 \times 24$ | $4 \times 8$ | $4 \times 80$ | $5 \times 70$ | $6 \times 40$ |
| 2,5 $\times 6$ | $4 \times 10$ | $5 \times 10$ | $5 \times 80$ | $6 \times 45$ |
| $3 \times 8$ | $4 \times 12$ | $5 \times 12$ | $5 \times 90$ | $6 \times 50$ |
| $3 \times 10$ | $4 \times 14$ | $5 \times 16$ | $5 \times 100$ | $6 \times 60$ |
| $3 \times 12$ | $4 \times 16$ | $5 \times 18$ | $6 \times 10$ | $6 \times 70$ |
| $3 \times 14$ | $4 \times 18$ | $5 \times 20$ | $6 \times 12$ | $6 \times 80$ |
| $3 \times 16$ | $4 \times 20$ | $5 \times 24$ | $6 \times 14$ | $6 \times 90$ |
| $3 \times 18$ | $4 \times 25$ | $5 \times 25$ | $6 \times 16$ | $6 \times 100$ |
| $3 \times 20$ | $4 \times 28$ | $5 \times 28$ | $6 \times 18$ |  |

